FIG. 1

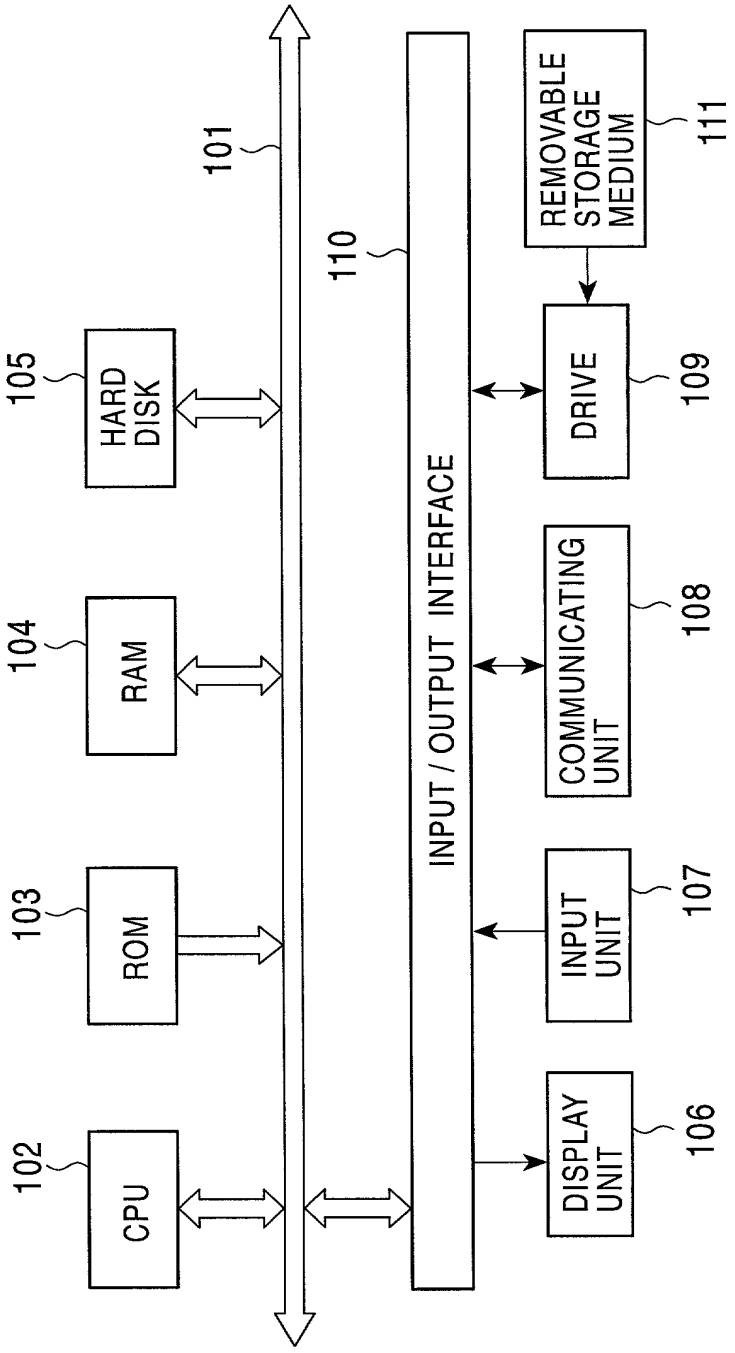

101
102
CPU
103
ROM
104
RAM
105
HARD DISK
106
DISPLAY UNIT
107
INPUT UNIT
108
COMMUNICATING UNIT
109
DRIVE
110
INPUT / OUTPUT INTERFACE
111
REMOVABLE STORAGE MEDIUM

FIG. 2

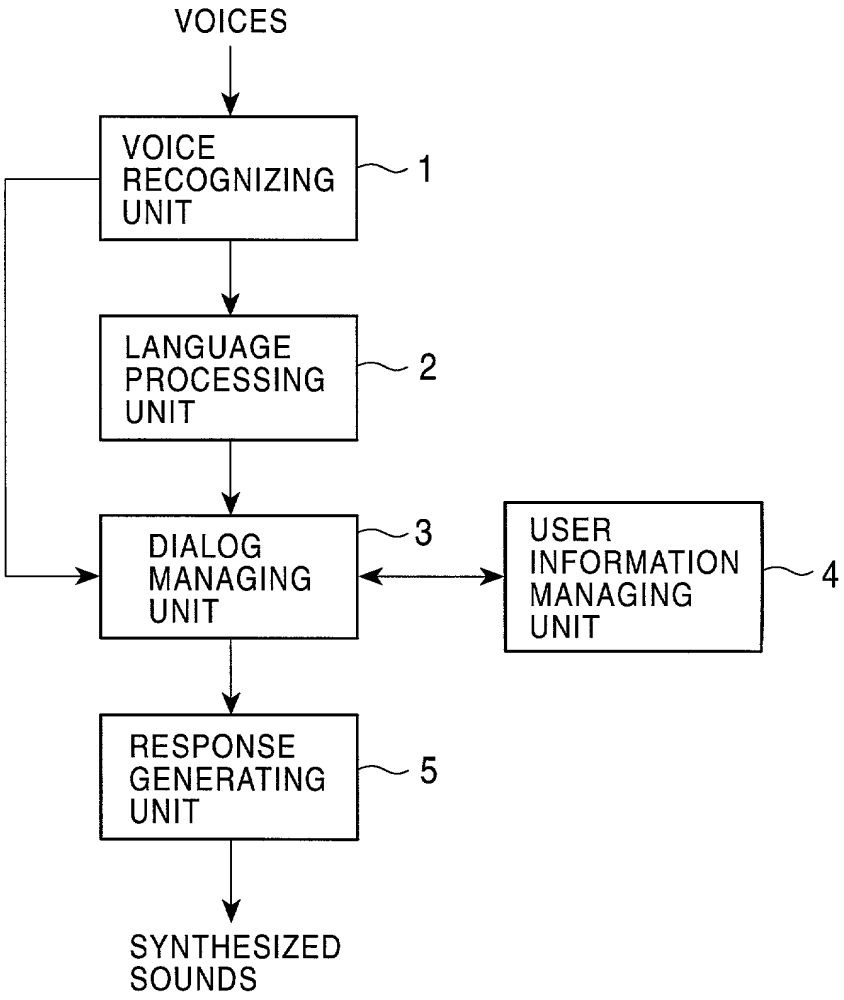

VOICES
VOICE RECOGNIZING UNIT
1
LANGUAGE PROCESSING UNIT
2
DIALOG MANAGING UNIT
3
USER INFORMATION MANAGING UNIT
4
RESPONSE GENERATING UNIT
5
SYNTHESIZED SOUNDS

FIG. 3

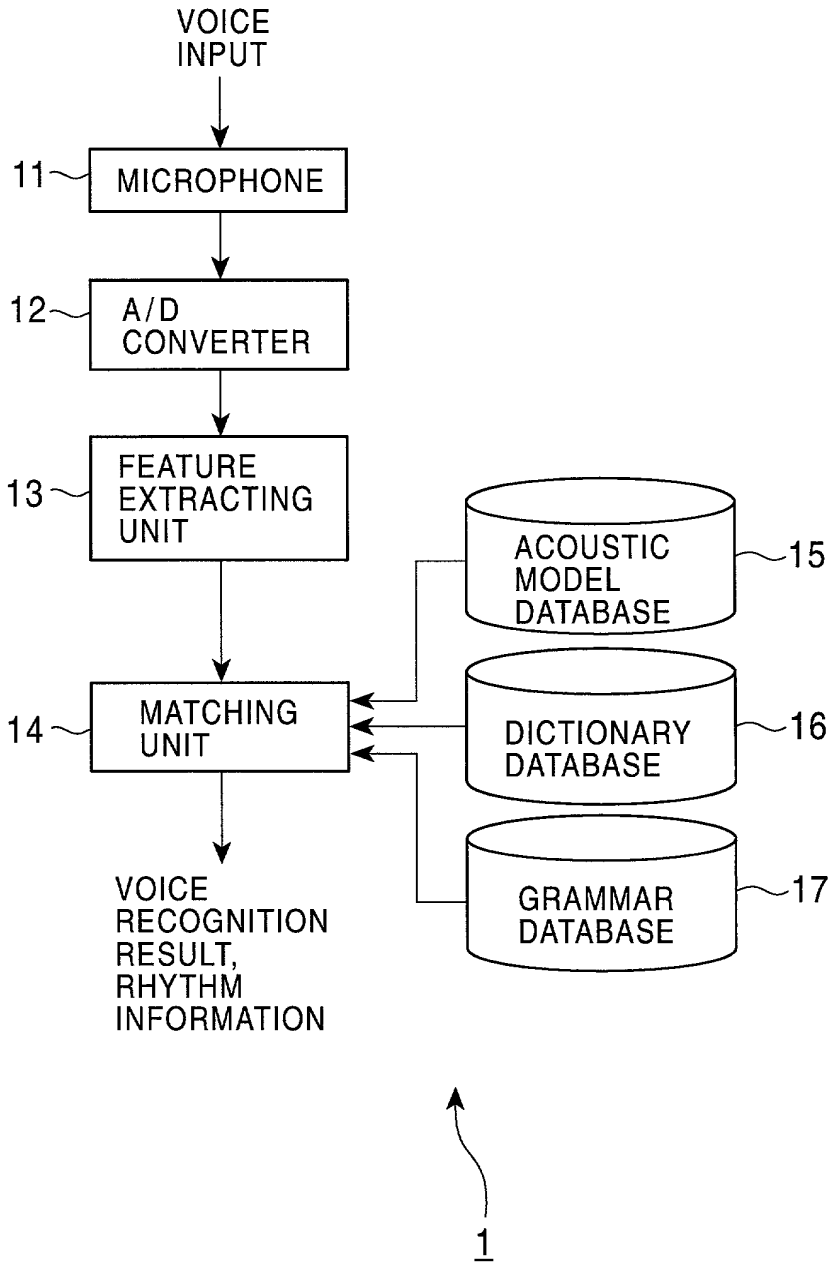

VOICE INPUT
11
MICROPHONE
12
A/D CONVERTER
13
FEATURE EXTRACTING UNIT
14
MATCHING UNIT
15
ACOUSTIC MODEL DATABASE
16
DICTIONARY DATABASE
17
GRAMMAR DATABASE
VOICE RECOGNITION RESULT, RHYTHM INFORMATION
1

FIG. 4

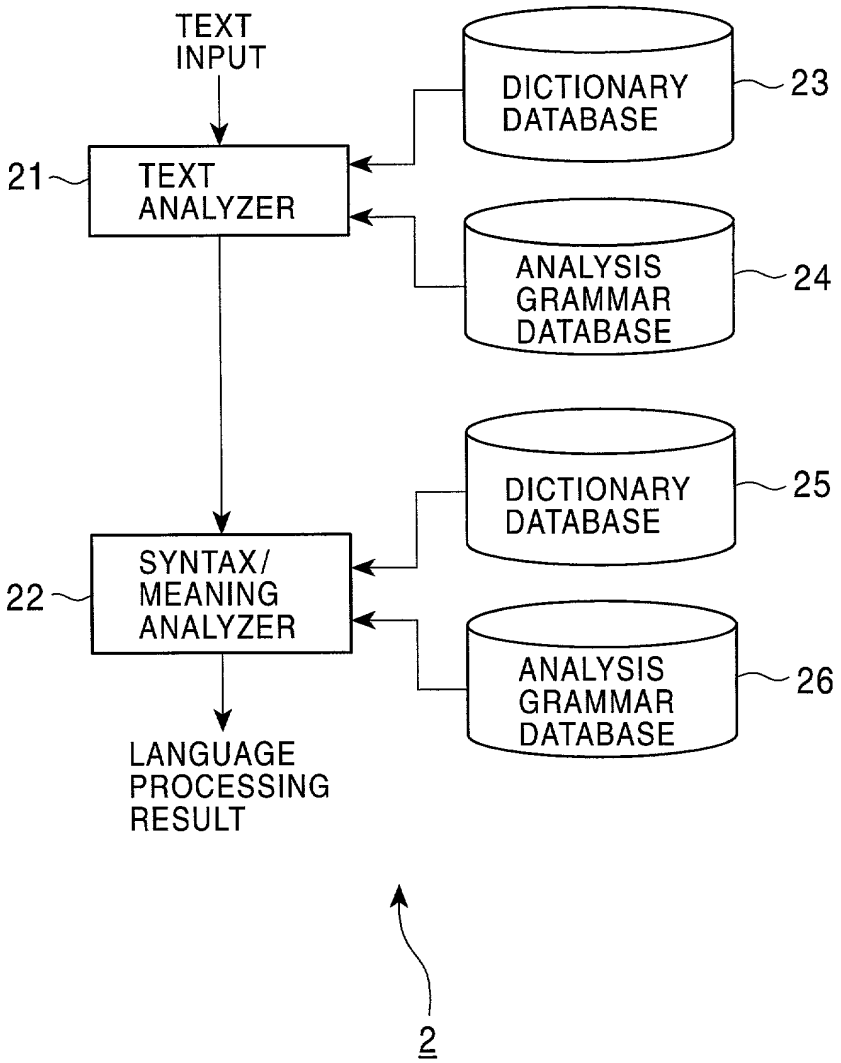

TEXT
INPUT
DICTIONARY
DATABASE
23
21
TEXT
ANALYZER
ANALYSIS
GRAMMAR
DATABASE
24
DICTIONARY
DATABASE
25
22
SYNTAX/
MEANING
ANALYZER
ANALYSIS
GRAMMAR
DATABASE
26
LANGUAGE
PROCESSING
RESULT
2

FIG. 5

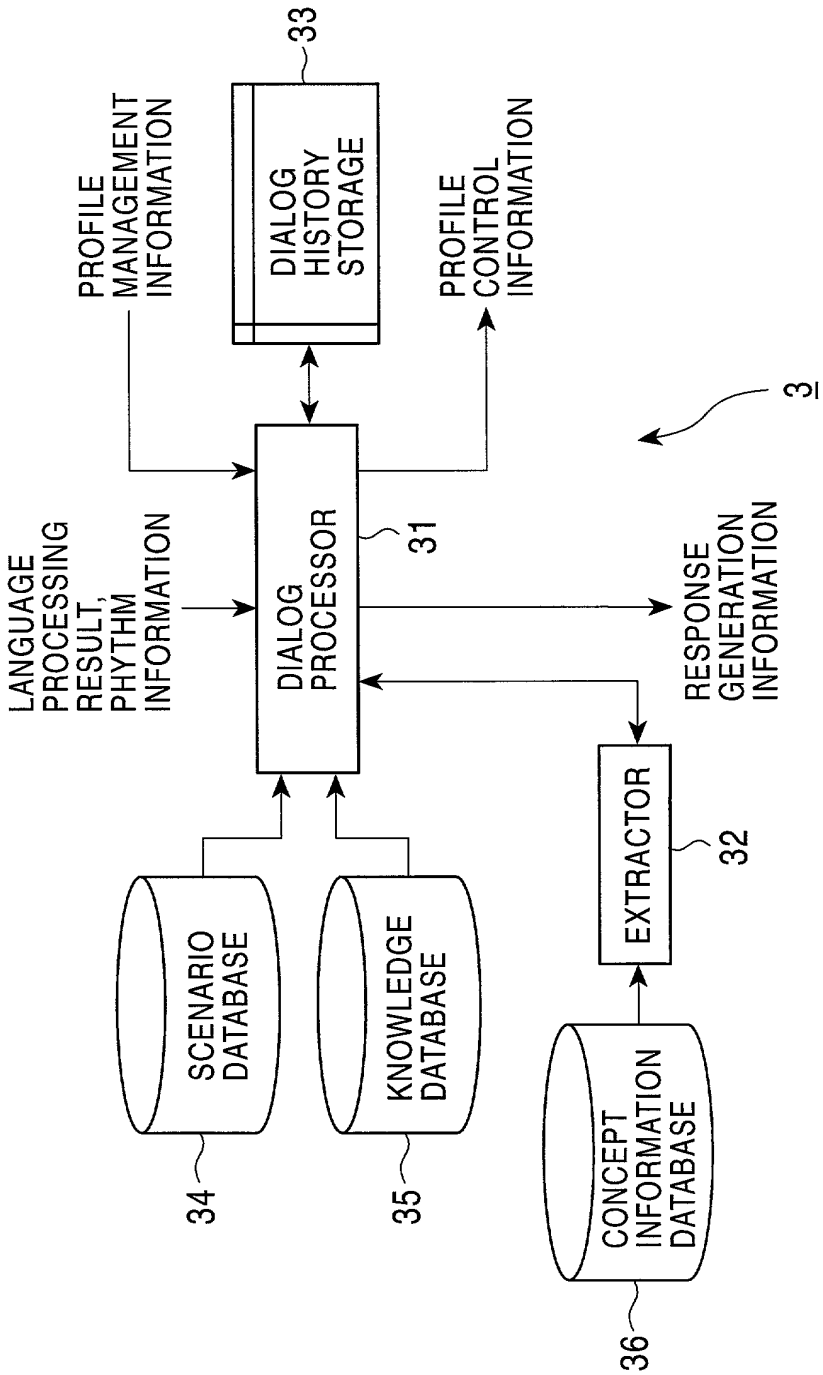

3
DIALOG PROCESSOR
31
DIALOG HISTORY STORAGE
33
PROFILE MANAGEMENT INFORMATION
PROFILE CONTROL INFORMATION
LANGUAGE PROCESSING RESULT, PHYTHM INFORMATION
RESPONSE GENERATION INFORMATION
EXTRACTOR
32
SCENARIO DATABASE
34
KNOWLEDGE DATABASE
35
CONCEPT INFORMATION DATABASE
36

FIG. 6

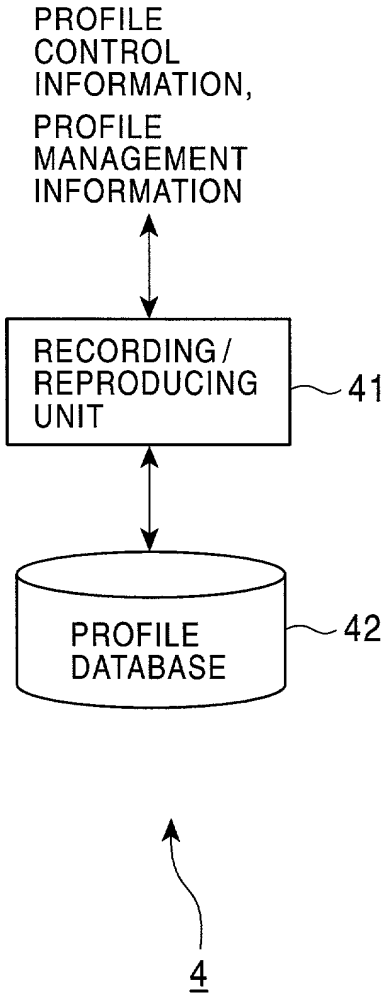

PROFILE CONTROL INFORMATION,
PROFILE MANAGEMENT INFORMATION
RECORDING/ REPRODUCING UNIT
41
PROFILE DATABASE
42
4

FIG. 7A

IDENTIFIER	INTEREST INFORMATION	THRESHOLD
C1	MOVIE	4
C2	MUSIC	3
C3	CAR	7
C4	BOOK	5
C5	TRAVEL	5

FIG. 7B

IDENTIFIER	INTEREST INFORMATION	NUMBER OF TIMES	INTEREST FLAG
C1	MOVIE	3	0
C2	MUSIC	4	0
C3	CAR	5	1
C4	BOOK	2	0
C5	TRAVEL	3	1

FIG. 8

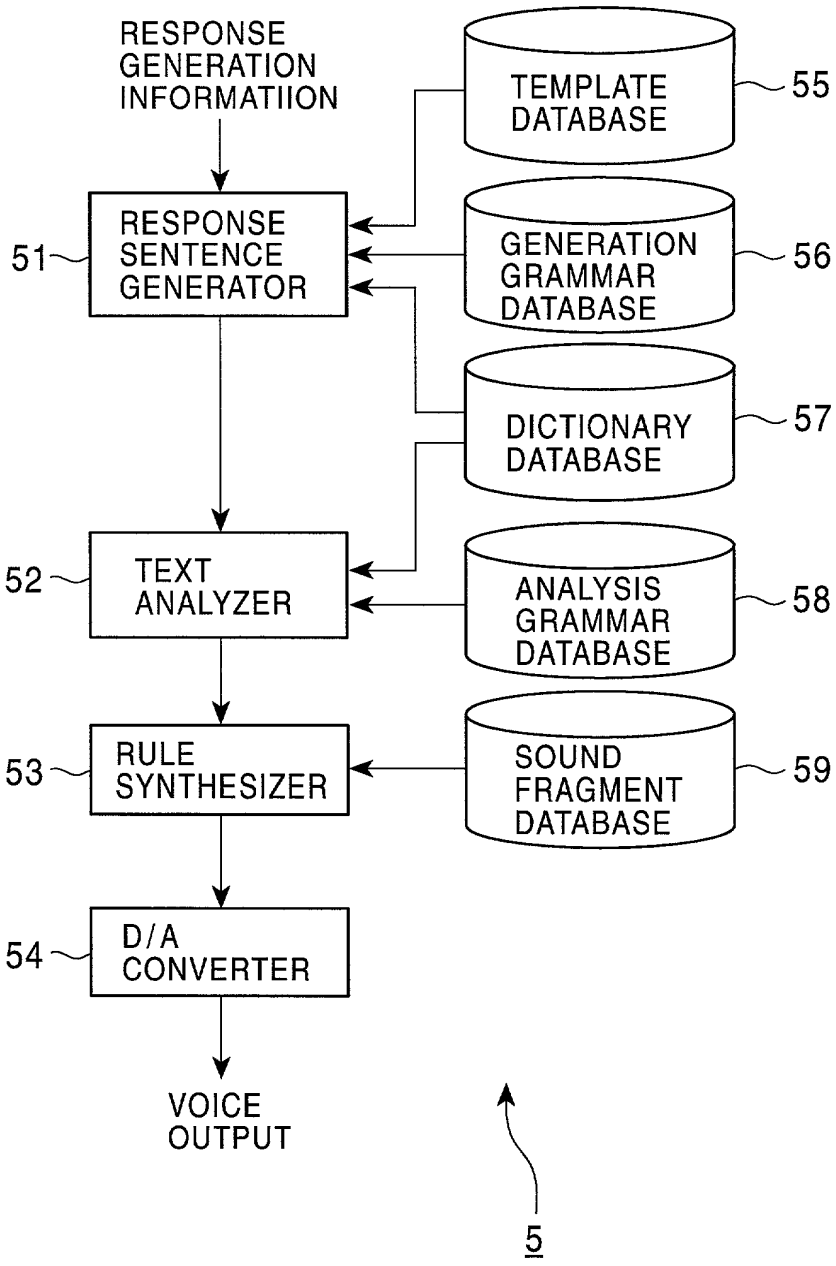

RESPONSE GENERATION INFORMATIION
RESPONSE SENTENCE GENERATOR
51
TEXT ANALYZER
52
RULE SYNTHESIZER
53
D/A CONVERTER
54
VOICE OUTPUT
TEMPLATE DATABASE
55
GENERATION GRAMMAR DATABASE
56
DICTIONARY DATABASE
57
ANALYSIS GRAMMAR DATABASE
58
SOUND FRAGMENT DATABASE
59
5

FIG. 9

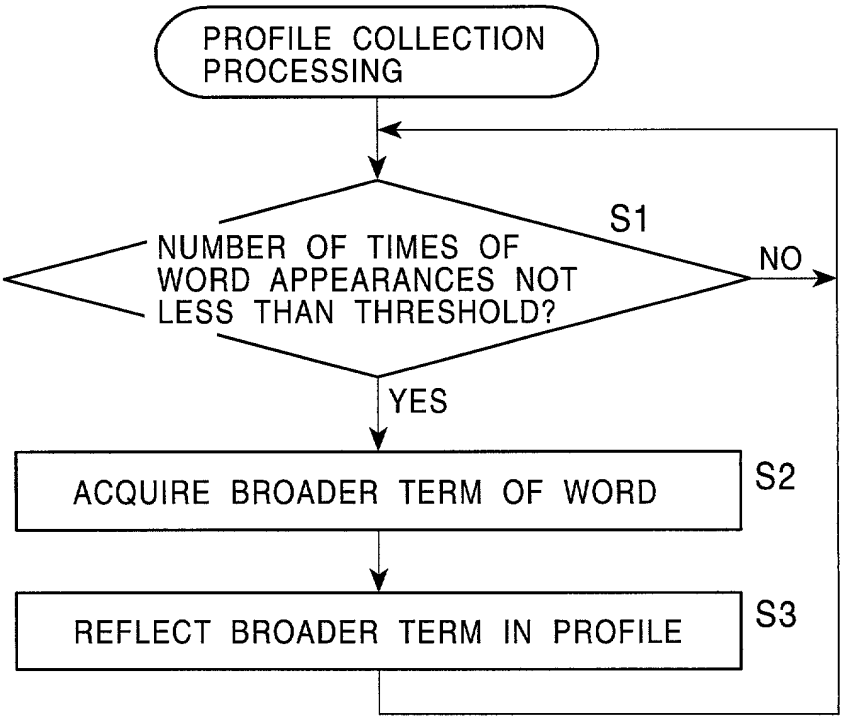

PROFILE COLLECTION PROCESSING
S1
NUMBER OF TIMES OF WORD APPEARANCES NOT LESS THAN THRESHOLD?
NO
YES
ACQUIRE BROADER TERM OF WORD
S2
REFLECT BROADER TERM IN PROFILE
S3

FIG. 10

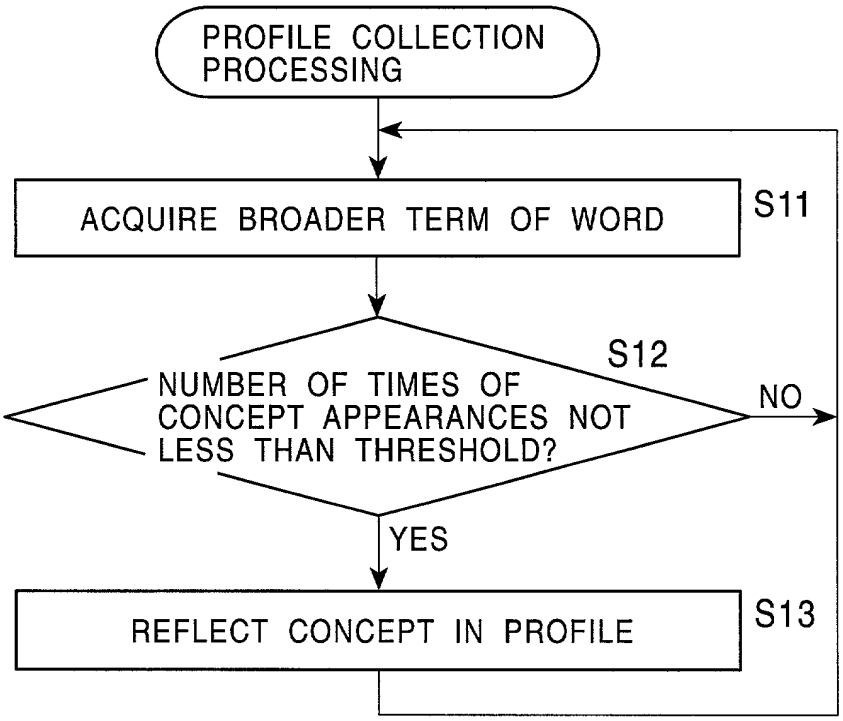

PROFILE COLLECTION PROCESSING
ACQUIRE BROADER TERM OF WORD
S11
NUMBER OF TIMES OF CONCEPT APPEARANCES NOT LESS THAN THRESHOLD?
S12
NO
YES
REFLECT CONCEPT IN PROFILE
S13

FIG. 11

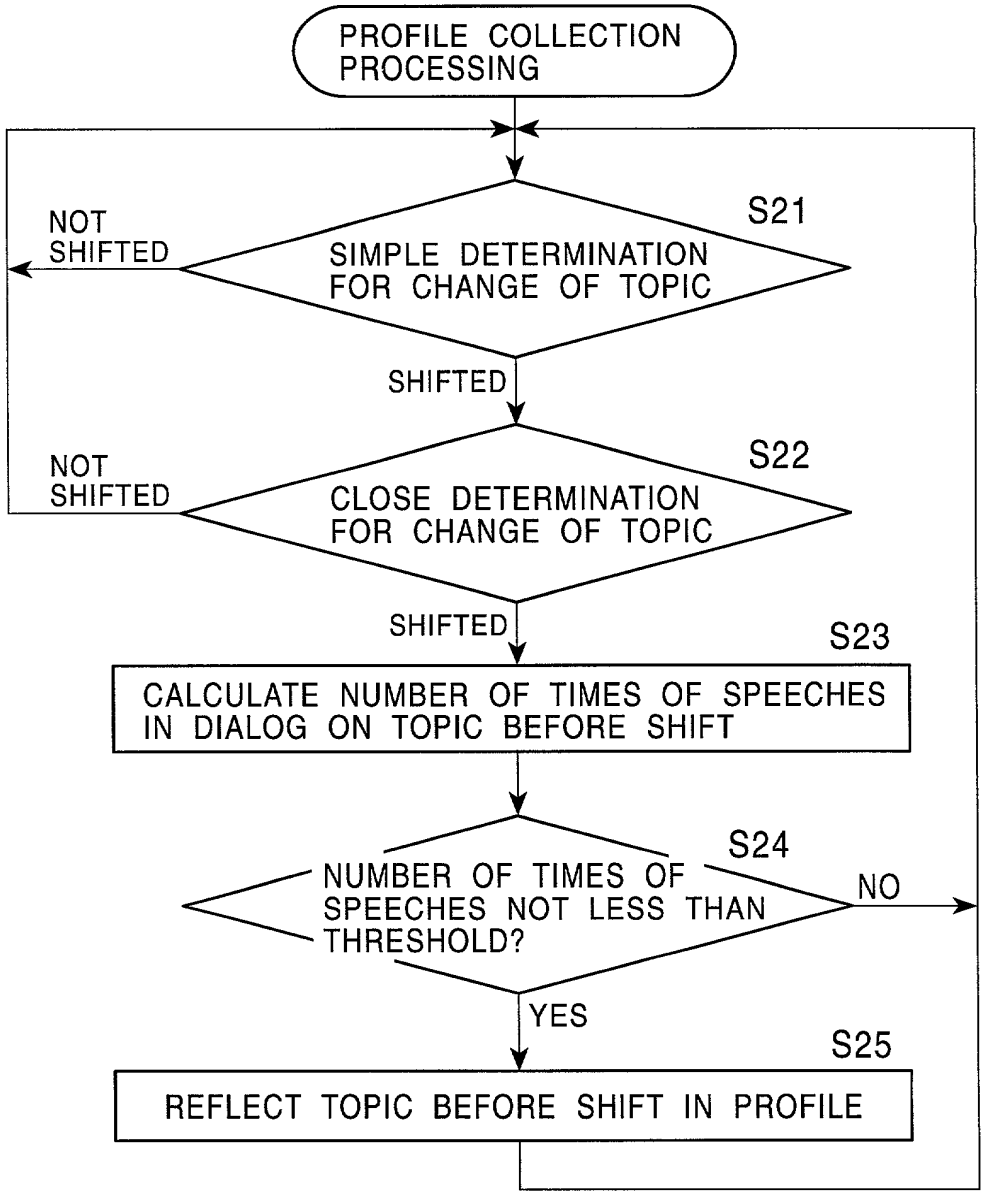

PROFILE COLLECTION PROCESSING
S21
SIMPLE DETERMINATION FOR CHANGE OF TOPIC
NOT SHIFTED
SHIFTED
S22
CLOSE DETERMINATION FOR CHANGE OF TOPIC
NOT SHIFTED
SHIFTED
S23
CALCULATE NUMBER OF TIMES OF SPEECHES IN DIALOG ON TOPIC BEFORE SHIFT
S24
NUMBER OF TIMES OF SPEECHES NOT LESS THAN THRESHOLD?
NO
YES
S25
REFLECT TOPIC BEFORE SHIFT IN PROFILE

FIG. 12

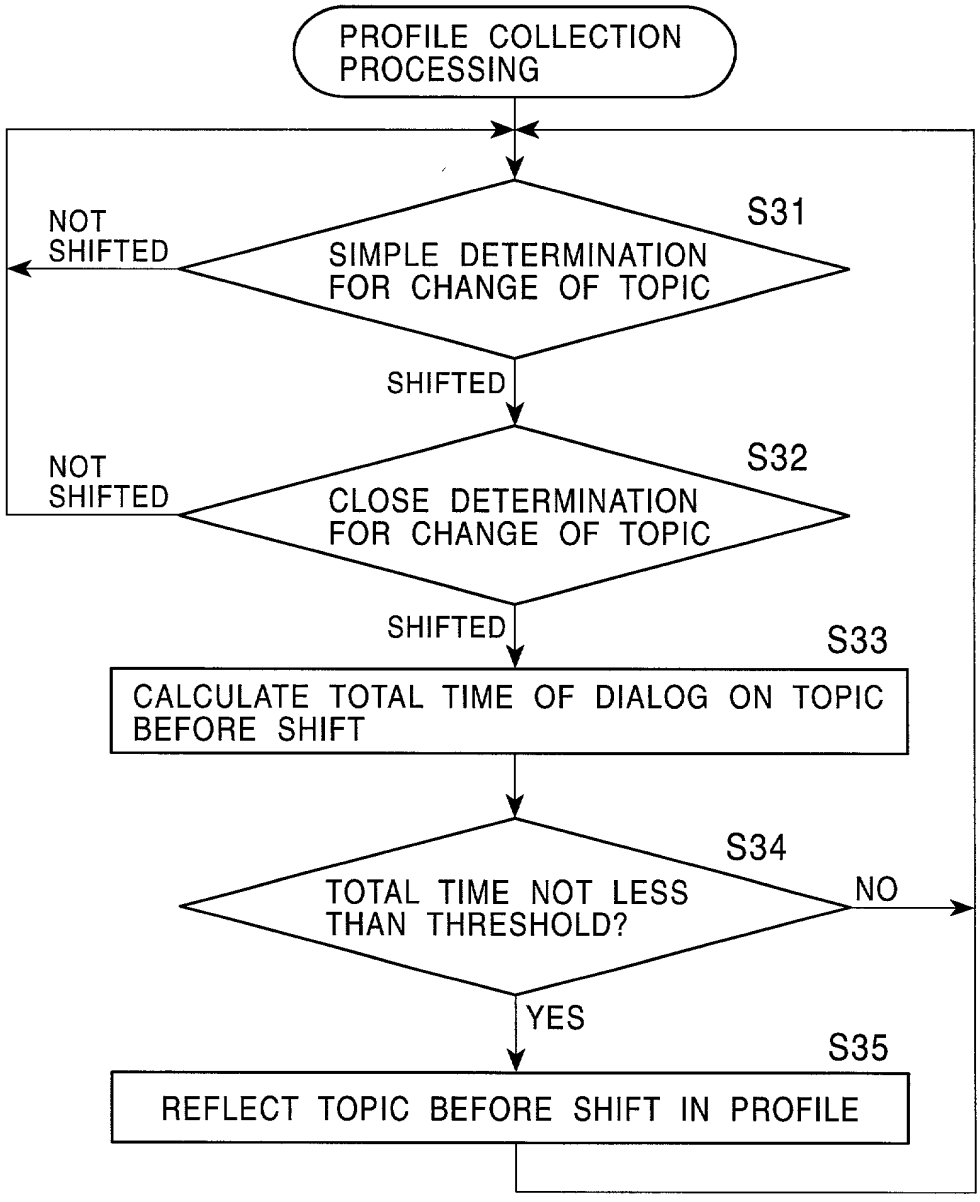
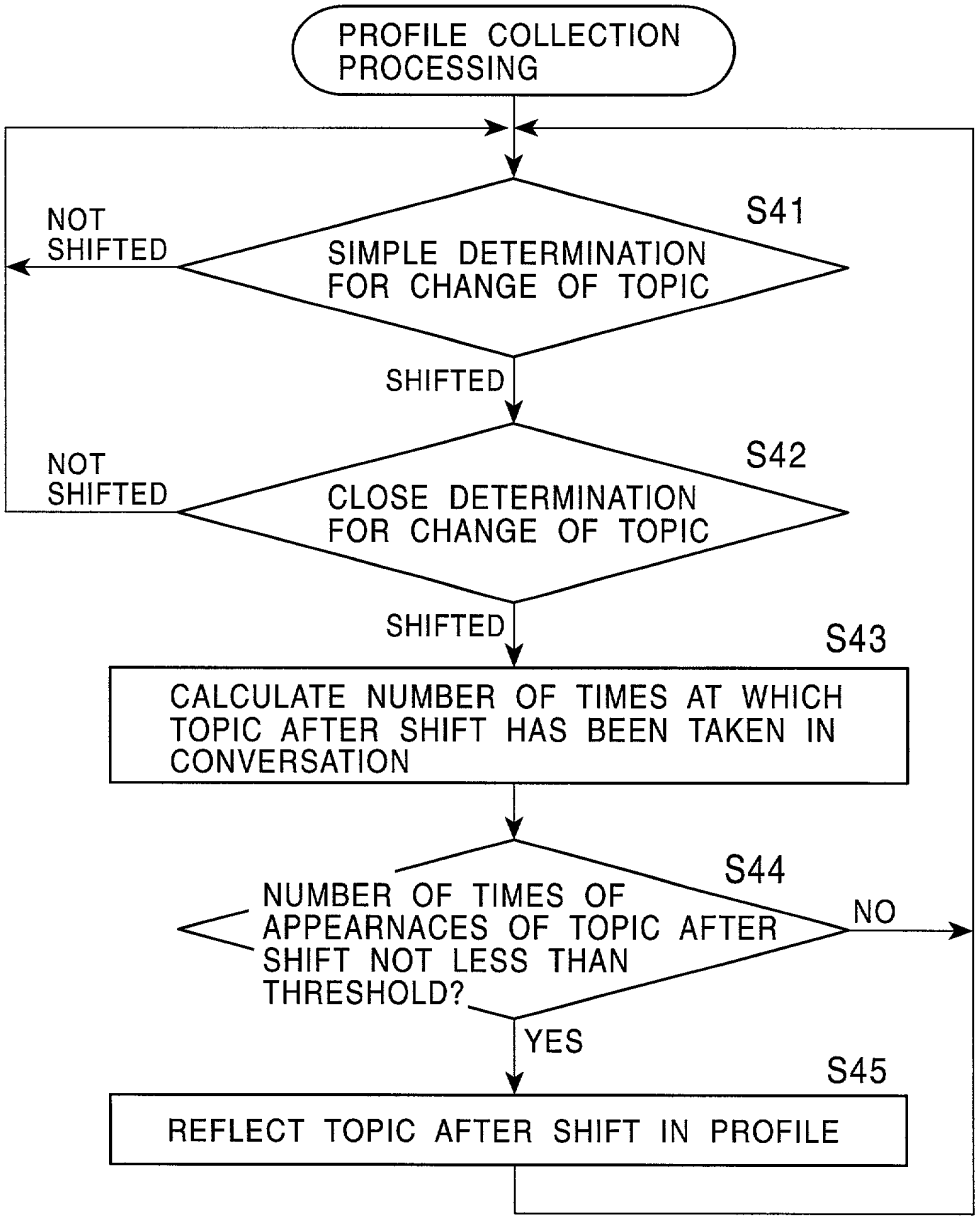

PROFILE COLLECTION PROCESSING
S31
SIMPLE DETERMINATION FOR CHANGE OF TOPIC
NOT SHIFTED
SHIFTED
S32
CLOSE DETERMINATION FOR CHANGE OF TOPIC
NOT SHIFTED
SHIFTED
S33
CALCULATE TOTAL TIME OF DIALOG ON TOPIC BEFORE SHIFT
S34
TOTAL TIME NOT LESS THAN THRESHOLD?
NO
YES
S35
REFLECT TOPIC BEFORE SHIFT IN PROFILE

FIG. 13


PROFILE COLLECTION PROCESSING
S41
SIMPLE DETERMINATION FOR CHANGE OF TOPIC
NOT SHIFTED
SHIFTED
S42
CLOSE DETERMINATION FOR CHANGE OF TOPIC
NOT SHIFTED
SHIFTED
S43
CALCULATE NUMBER OF TIMES AT WHICH TOPIC AFTER SHIFT HAS BEEN TAKEN IN CONVERSATION
S44
NUMBER OF TIMES OF APPEARNACES OF TOPIC AFTER SHIFT NOT LESS THAN THRESHOLD?
NO
YES
S45
REFLECT TOPIC AFTER SHIFT IN PROFILE